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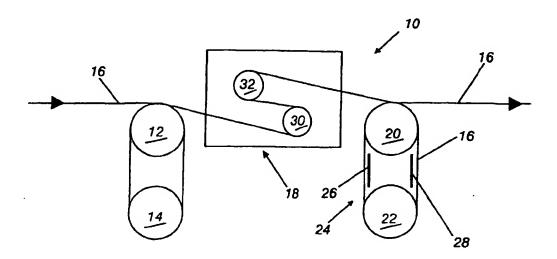
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(54) Title: YARN MAKING PROCESS AND APPARATUS



(57) Abstract: The present invention relates to the combination of a tension gate (18) and an air shield (24) in the relax zone of a fiber production process. The combination provides a synergistic effect over an air shield (24) alone, or a tension gate (18) alone, or the added effect of both a tension gate (18) and an air shield (24). The air shield (24) is a plate like structure with or without perforations. The air shield plates (26, 28) are placed in close proximity to a pair of rolls (20, 22) following the tension gate (18). The plates (26, 28) are positioned inside of the threadline between the pair of rolls (20, 22). The tension gate (18) can be one or more air drag devices, one or more liquid drag devices, or one or more solid surface contact devices, or a combination of any of the above. The apparatus and the process for using the apparatus is disclosed and claimed.

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